

**SUPPORTING STATEMENT**

30 CFR 57.22004(c), 57.22229, 57.22230, 57.22231, and 57.22239, Notification of Methane Detected in Mine Atmosphere. (Applies to underground metal and nonmetal mines.)

**A. JUSTIFICATION**

1. Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. Attach a copy of the appropriate section of each statute and of each regulation mandating or authorizing the collection of information.

Methane is a flammable gas found in underground mining. Although methane is often associated with underground coal mines, it also occurs in some metal and nonmetal mines. The potential for methane exists in every underground mine in the United States. Methane is a colorless, odorless, tasteless gas, and it tends to rise to the roof of a mine because it is lighter than air. Although methane itself is nontoxic, its presence reduces the oxygen content by dilution when mixed with air, and consequently can act as an asphyxiant when present in large quantities.

Methane may enter the mining environment from a variety of sources including fractures, faults, or shear zones overlying or underlying the strata that surrounds the ore body, or from the ore body itself. It may occur as an occluded gas within the ore body. Methane mixed with air is explosive in the range of 5 to 15 percent, provided that 12 percent or more oxygen is present. The presence of dust containing volatile matter in the mine atmosphere may further enhance the explosion potential of methane in a mine.

Standards 57.22004(c), 57.22231, and 57.22239 require operators of underground metal and nonmetal mines to notify MSHA as soon as possible if any of the following events occur; (a) there is an outburst that results in 0.25 percent or more methane in the mine atmosphere, (b) there is a blowout that results in 0.25 percent or more methane in the mine atmosphere, (c) there is an ignition of methane, (d) air sample results indicate 0.25 percent or more methane in the mine atmosphere of a I-B, I-C, II-B, V-B, or Category VI mine. If methane reaches 2.0 percent in a Category IV mine; or methane reaches 0.25 percent in the mine atmosphere of a Subcategory I-B, II-B, V-B, and VI mines MSHA shall be notified immediately. Although the standards do not specify how MSHA is to be notified, MSHA anticipates that the notifications would be made by telephone.

Standards 57.22229(c) and (d) and 57.22230(b) and (c) require that the mine atmosphere be tested for methane at least once every seven days by a competent

person or atmospheric monitoring system, or a combination of both. Standards 57.22229(c) and (d) and 57.22230(b) and (c) require that the person performing the tests certify by signature and date that the tests have been

conducted. Certifications of examinations shall be kept for at least one year and made available at the mine for inspection by MSHA inspectors. Where examinations disclose hazardous conditions, affected persons must be informed.

**2. Indicate how, by whom, how frequently, and for what purpose the information is to be used. For revisions, extensions, and reinstatements of a currently approved collection, indicate the actual use the agency has made of the information received from the current collection.**

MSHA estimates that once in every 5 years a methane event will occur that would require notification under Standards 57.22004(c), 57.22231, and 57.22239. If a methane event occurs requiring notification pursuant to standard 57.22004(c) the Administrator for Metal and Nonmetal Safety and Health appoints an MSHA committee to investigate the occurrence. Based on the results of the investigation, it is decided if the mine is classified in the appropriate category. If notification is made pursuant to standard 57.22231 or 57.22239, the District Manager of the District in which the mine is located will decide whether the event requires any action on the part of MSHA. Based on the information provided during notification the event may be investigated.

Under Standards 57.22229 (c) and (d), and 57.22230 (b) and (c), certifications are reviewed by MSHA inspectors during on-site inspections to verify that weekly tests are being conducted. Certification records are reviewed once each calendar quarter.

**3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses, and the basis for the decision for adopting this means of collection. Also describe any consideration of using information technology to reduce burden.**

No improved information technology has been identified that would reduce the burden. However, in order to comply with the Government Paperwork Elimination Act, mine operators may retain the records in whatever method they chose, which may include utilizing computer technology.

**4. Describe efforts to identify duplication. Show specifically why any similar information already available cannot be used or modified for use for the purpose(s) described in 2 above.**

There is no similar or duplicate information that could be used. The information reported pertains to a particular methane occurrence at the mine.

**5.. If the collection of information has a significant impact on a substantial number of small businesses or other small entities (item 15 of the Paperwork Reduction Act Submission form), describe the methods used to minimize burden.**

The provisions of the Federal Mine Safety and Health Act of 1977 (Mine Act), and MSHA's regulations and standards, apply to all operations, regardless of size, because accidents, injuries, and illnesses occur at all mines. Congress intended that the law be enforced at all mining operations within MSHA's jurisdiction regardless of their size, and that information collection and

recordkeeping requirements be consistent with efficient and effective enforcement of the Act. See S. Rep. No. 181, 95th Cong., 1st Sess. 28 (1977). However, Congress did recognize that small operations may face problems in complying with some provisions of the Mine Act. Section 103(e) of the Mine Act directs the Secretary of Labor not to impose an unreasonable burden on small businesses in obtaining any information under the Mine Act. Accordingly, the Agency takes this into consideration when developing regulatory requirements, and when appropriate and consistent with ensuring the safety and health of the nation's miners, different requirements for small and large operations exist. See, for example, 30 CFR 49.3 and 50.11(b). To provide distinct information collection requirements for small mines in the regulation at hand, however, would not in our opinion promote the objectives of the Mine Act.

**6. Describe the consequence to Federal program or policy activities if the collection is not conducted or is conducted less frequently.**

MSHA has determined that these requirements are the minimum necessary to ensure safety. Further reduction of these requirements could allow unsafe conditions to develop. Section 101(a)(9) of the Mine Act prohibits any regulatory action which would reduce the protection given miners by an existing regulation.

**7. Explain any special circumstances that would cause an information collection to be conducted in a manner:**

- \* requiring respondents to report information to the agency more often than quarterly;
- \* requiring respondents to prepare a written response to a collection of information in fewer than 30 days after receipt of it;
- \* requiring respondents to submit more than an original and two copies of any document;
- \* requiring respondents to retain records, other than health, medical, government contract, grant-in-aid, or tax records for more than three years;
- \* in connection with a statistical survey, that is not designed to produce valid and reliable results that can be generalized to the universe of study;
- \* requiring the use of a statistical data classification that has not been reviewed and approved by OMB;
- \* that includes a pledge of confidentiality that is not supported by authority established in statute or regulation, that is not supported by disclosure and data security policies that are consistent with the pledge, or which unnecessarily impedes sharing of data with other agencies for compatible confidential use; or
- \* requiring respondents to submit proprietary trade secret, or other confidential information unless the agency can demonstrate that it has instituted procedures to protect the information's confidentiality to the extent permitted by law.

Requirements are consistent with the general information collection guidelines in 5 CFR 1320.5.

**8. If applicable, provide a copy and identify the date and page number of publication in the Federal Register of the agency's notice, required by 5 CFR**

1320.8(d), soliciting comments on the information collection prior to submission to OMB. Summarize public comments received in response to that notice and describe actions taken by the agency in response to the comments. Specifically address comments received on cost and hour burden.

Describe efforts to consult with persons outside the agency to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or reported.

Consultation with representatives of those from whom information is to be obtained or those who must compile records should occur at least once every 3 years -- even if the collection of information activity is the same as in prior periods. There may be circumstances that may preclude consultation in a specific situation. These circumstances should be explained.

MSHA will published a 60-day preclearance FEDERAL REGISTER notice to solicit public comments regarding the extension of this information collection.

**9. Explain any decision to provide any payment or gift to respondents, other than remuneration of contractors or grantees.**

MSHA has made no decision to provide any form of compensation to the respondents.

**10. Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy.**

No records requiring confidentiality are required.

**11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private. This justification should include the reasons why the agency considers the questions necessary, the specific uses to be made of the information, the explanation to be given to persons from whom the information is requested, and any steps to be taken to obtain their consent.**

The requirements contain no questions of a sensitive nature.

**12. Provide estimates of the hour burden of the collection of information.**

Although the standards 57.22004(C), 57.22231, AND 57.22239 do not specify how the mine operator is to notify MSHA, it is anticipated that based on past experience a mine management official with an estimated hourly salary of \$45.79 will notify MSHA by telephone and the telephone call would be about 15 minutes 9(0.25 hr.) in duration.

Burden hours:

1 occurrence x 0.25 hours = .25 hours

Burden cost:

0.25 hours x \$45.79 = \$11.45

Under standards 57.22229(c) and (d), and 57.22230 (b) and (c), there are seven mines affected by these standards. Affected mines use a combination of atmospheric monitoring systems and competent persons to perform the required tests. The atmospheric monitoring systems measure the mine atmosphere continuously at most testing locations. The weekly certification record is either computer generated or consists of a log containing signature and date entries by competent persons. Each weekly certification takes approximately 5

minutes(0.083 hr.)and is completed by a mine management official with an estimated hourly salary of \$45.79 per hour.

**Hour Burden:**

7 mines x 52 certifications x 0.083 hour = 30 hours

**Hour Burden Cost:**

30 hours x \$45.79/hour = \$1,373.70

In addition, the standards require the mine operator to inform all affected persons where such examinations disclose hazardous conditions. Affected persons are informed by means of automatic warning devices triggered by an atmospheric monitoring system or by radio, telephone or word of mouth. Based on past experience, hazardous conditions are rarely disclosed, however for burden calculations MSHA estimates one event per annum at each of the 7 mines affected by the standards. Approximate time to inform affected persons is 10 minutes(0.1667 hr.) per occurrence. A mine management official with an estimated hourly salary of \$45.79 per hour would inform affected persons.

**Hour Burden:**

7 mines x 1 occurrence x 0.1667 hours = 1.1669 hours

**Hour Burden Cost:**

1.1669 hours x \$45.79/hour = \$53.43

**TOTAL BURDEN HOURS: = 31 HOURS**

**13. Provide an estimate of the total annual cost burden to respondents or recordkeepers resulting from the collection of information. (Do not include the cost of any hour burden shown in Items 12 and 14).**

There are no costs to respondents or recordkeepers resulting from the collection of this information.

**14. Provide estimates of annualized cost to the Federal government. Also, provide a description of the method used to estimate cost, which should include quantification of hours, operational expenses (such as equipment, overhead, printing, and support staff), and any other expense that would not have been incurred without this collection of information. Agencies also may aggregate cost estimates from Items 12, 13, and 14 in a single table.**

No Federal inspection costs have been associated specifically for standards 57.22229 (c) and (d), and 57.22230 (b) and (c). The review/inspection of weekly certifications is just one aspect of the annual inspection. Complete inspections are required under Section 103(a) of the Mine Act and are required 4 times a year for underground mines and twice a year for surface operations. The average time required to finish a complete inspection is as follows:

Metal/Nonmetal Underground Mine:	49.66 hours
Metal/Nonmetal Surface Operation:	19.08 hours

The average grade and salary of a mine inspector is GS 12/5, at \$58,031 per annum or \$28 (\$27.90) per hour.

MSHA estimates that once in every 5 years a methane emission will occur that would require notification under Standards 57.22004(c), 57.22231, and 57.22239. However, for the purpose of estimating burden, one occurrence per

year will be used. Normally the committee appointed by the Administrator would consist of four individuals: a committee chairman (technical specialist) usually selected from the Headquarters staff; two technical specialists selected from Technical Support or District staff; and an inspector familiar with the mine. All four committee members would conduct the field investigation which would normally take 3 days (24 hours including travel time. Report writing would involve one day (8 hours) for the committee chairman.

One GS 14/5 chairman (\$39 per hour) x 32 hours =	\$1,248
Two GS 13/5 technical specialist ( \$33 per hour)	
X 24 hours =	\$ 792
One GS 12/5 Inspector (\$28 per hour) X 24 hours =	<u>\$ 672</u>
TOTAL FOR ONE OCCURRENCE =	\$2,712

**15. Explain the reasons for any program changes or adjustments reported in Items 13 or 14 of the OMB Form 83-I.**

There was no other significant increase or decrease in this burden.

**16. For collections of information whose results are planned to be published, outline plans for tabulation and publication. Address any complex analytical techniques that will be used. Provide the time schedule for the entire project, including beginning and ending dates of the collection of information, completion of report, publication dates, and other actions.**

There are no statistical aspects.

**17. If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons that display would be inappropriate.**

MSHA is not seeking approval to either display or not display the expiration date for OMB approval of this information.

**18. Explain each exception to the certification statement identified in Item 19, "Certification for Paperwork Reduction Act Submissions," of OMB Form 83-I.**

There are no certification exceptions identified with this information collection.

DEPARTMENT OF LABOR

Mine Safety and Health Administration

Proposed Information Collection Request  
Submitted for Public Comment and Recommendations;  
Notification of Methane Detected in Mine Atmosphere

ACTION: Notice.

SUMMARY: The Department of Labor, as part of its continuing effort to reduce paperwork and respondent burden conducts a preclearance consultation program to provide the general public and Federal agencies with an opportunity to comment on proposed and/or continuing collections of information in accordance with the Paperwork Reduction Act of 1995 (PRA95) [44 U.S.C. 3506(c)(2)(A)]. This program helps to ensure that requested data can be provided in the desired format, reporting burden (time and financial resources) is minimized, collection instruments are clearly understood, and the impact of collection requirements on respondents can be properly assessed.

DATES: Submit comments on or before June 5, 2000.

ADDRESSES: Send comments to Theresa M. O'Malley, Program Analysis Officer, Office of Program Evaluation and Information Resources, 4015 Wilson Boulevard, Room 715, Arlington, VA 22203-1984. Commenters are encouraged to send their comments on a computer disk, or via Internet E-mail to [tomalley@msha.gov](mailto:tomalley@msha.gov), along with an original printed copy. Ms. O'Malley can be reached at (703) 235-1470 (voice), or (703) 235-1563 (facsimile).

FOR FURTHER INFORMATION CONTACT: Theresa M. O'Malley, Program Analysis Officer, Office of Program Evaluation and Information Resources, U.S. Department of Labor, Mine Safety and Health Administration, Room 719, 4015 Wilson Boulevard, Arlington, VA 22203-1984.

Ms. O'Malley can be reached at [tomalley@msha.gov](mailto:tomalley@msha.gov) (Internet E-mail), (703) 235-1470 (voice), or (703) 235-1563 (facsimile).

SUPPLEMENTARY INFORMATION:

I. Background

Sections 103(c), (i), and (j) of the Federal Mine Safety and Health Act of 1977 authorize the recordkeeping and reporting requirements implemented in 30 CFR 57, Subpart T - Safety Standards for Methane in Metal and Nonmetal mines. Methane is a flammable gas found in underground mining. Methane is a colorless, odorless, tasteless gas, and it tends to rise to the roof of a mine because it is lighter than air. Although methane itself is nontoxic, its presence reduces the oxygen content by dilution when mixed with air, and consequently can act as an asphyxiant when present in large quantities. Methane mixed with air is explosive in the range of 5 to 15 percent, provided that 12 percent or more oxygen is present. The presence of dust containing volatile matter in the mine atmosphere may further enhance the explosion potential of methane in a mine.

Metal and Nonmetal mine operators are required to notify MSHA as soon as possible if any of the following events occur:

(a) there is an outburst that results in 0.25 percent or more



methane in the mine atmosphere; (b) there is a blowout that results in 0.25 percent or more methane in the mine atmosphere; (c) there is an ignition of methane; (d) air sample results indicate 0.25 percent or more methane in the mine atmosphere of a Subcategory I-B, I-C, II-B, V-B, or Category

VI mine; If methane reaches 2.0 percent in a Category IV mine; or methane reaches 0.25 percent in the mine atmosphere of a Subcategory I-B, II-B, V-B, and VI mines, MSHA shall be notified immediately. MSHA investigates the occurrence to determine that the mine is placed in the proper category to follow appropriate precautionary standards.

## II. Desired Focus of Comments

Currently, the Mine Safety and Health Administration (MSHA) is soliciting comments concerning the proposed extension of the information collection related to the Notification of Methane Detected in Mine Atmospheres. MSHA is particularly interested in comments which:

- \* evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;

- \* evaluate the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;

- \* enhance the quality, utility, and clarity of the information to be collected; and

- \* minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submissions of responses.

A copy of the proposed information collection request may be viewed on the Internet by accessing the MSHA Home Page (<http://www.msha.gov>) and then choosing "Statutory and Regulatory Information" and "Paperwork Reduction Act Submissions (<http://www.msha.gov/regspwork.htm>)" Compliance Assistance Information", or by contacting the employee listed above in the For Further Information Contact section of this notice for a hard copy.

### III. Current Actions

MSHA is seeking an extension of the information collection related to certification and notification of methane detected in mine atmosphere.

Type of Review: Extension

Agency: Mine Safety and Health Administration

Title: Notification of Methane Detected in Mine Atmosphere

OMB Number: 1219-0103

Affected Public: Business or other for-profit

Record keeping: Certification of examinations shall be kept for at least one

year.

Cite/ Reference	Total Respondents	Frequency	Total Responses	Average Time per Response (hours)	Burden Hours*
57.22004(c)	1	Annually	1	15 minutes	15 minutes
57.22229(d) & 57.22230(b) and (c) (Inform miners)	7	Weekly	364	5 minutes	30 hours
	7	Annually	7	10 minutes	1 hour, 10 minutes
Total	8		372	0.0860 minutes	32 hours

\* Discrepancies due to rounding.

Total Annualized Capital/Startup Costs: \$0

Total Operating and Maintenance: \$0

Comments submitted in response to this notice will be summarized and/or included in the request for Office of Management and Budget approval of the information collection request; they will also become a matter of public record.

DATED:

George M. Fesak  
Director, Program Evaluation  
and Information Resources